

中国诸葛菜属(十字花科)新分类群*

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NEW TAXA OF *ORYCHOPHRAGMUS* (CRUCIFERAE) FROM CHINA

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Key words *Orychophragmus*; *O. taibaiensis* Z. M. Tan et B. X. Zhao; *O. hupehensis* (Pamp.) Z. M. Tan et X. L. Zhang; *O. diffusus* Z. M. Tan et J. M. Xu; New species
关键词 诸葛菜属; 太白诸葛菜; 湖北诸葛菜; 铺散诸葛菜; 新种

1 太白诸葛菜 新种 图1

Orychophragmus taibaiensis Z. M. Tan et B. X. Zhao, sp. nov. TYPE: Shaanxi(陕西), Meixian(眉县), Mt. Taibai(太白山), alt. 1150 m, 1995-07-02, Z. M. Tan et B. X. Zhao 95-54(holotype, SZ). Fig. 1

O. violaceus var. *hupehensis* auct. non (Pamp.) O. E. Schulz; Fl. Tsinling. 1(2): 401. 1974.

Species affinis *O. violaceo* (L.) O. E. Schulz, sed plantis saepe glabris, foliis summis simplicibus vel lyratis, petiolis 1.5~2.5 cm longis, rhachibus inflorescentiarum gracilibus, floribus laxissimis, siliquis tenuiter linearibus, 9~17 cm longis, 1.5~1.8 mm latis, seminibus flavo-brunneis vel subbrunneis differt.

Herbae annuae vel biennes, saepe glabrae. Plantae erectae. Caules erecti, 15~40 cm alti, plerumque simplices raro basi ramosi. Folia inferiora lyrata, lobis terminalibus cordatis vel ovato-deltatis, 2~15 cm longis, 2~10 cm latis, apice acutis vel obtusis, basi cordatis vel subtruncatis, inaequilateralibus, margine subintegris, sinuato-dentatis, irregulariter serratis vel dentatis, lobis lateralibus multo minoribus utrinque 2~4 alternantibus vel oppositis ad rhachim lobulis minutissimis intermixtis, petiolis ad basin auriculis binis semiamplexicaulibus instructis; folia summa indivisa vel lyrato-pinnatisecta, petiolis 1.5~2.5 cm longis ad basin auriculis 2 minutissimis, semiamplexicaulibus instructis. Racemi sub anthesi laxissimi, 4~12-flori, rhachibus gracilibus, pedicellis 1~2 cm longis. Sepala oblonga, 9~11 mm longa, apice acuta, pallide viridia vel purpurea, exteriora circ. 1.5 mm lata, interiora 3 mm lata, basi saccata. Petala saturate purpurea, late obovata, 18~20 mm longa, 6~8 mm lata, longe unguiculata. Stamina libera, 2 breviora 10~11 mm longa, 4 longiora 11~12 mm lon-

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ga, antheris flavis. Pistillum lineare, 12~13 mm longum, leviter tetragonum. Siliquae tenuiter lineares, 9~17 cm longae, 1.5~1.8 mm latae, tetragonae, viridulo-flavae, saepe glabrae vel raro puberulae, rostris 12~25 mm longis. Semina oblonga, circ. 2 mm longa, 1 mm lata, flavo-brunnea vel subbrunnea.

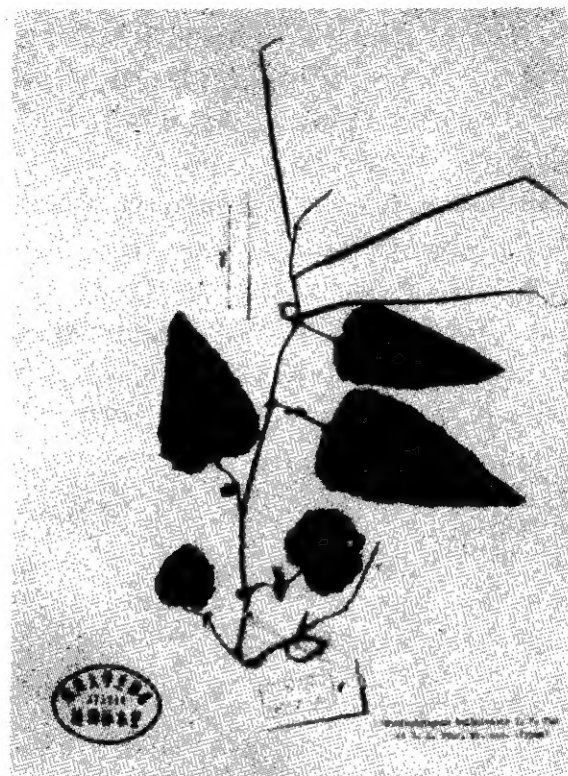


图1 太白诸葛菜

Fig. 1 *Orychophragmus taibaiensis* Z. M. Tan et B. X. Zhao

Shaanxi(陕西), Meixian(眉县), Mt. Taibai, alt. 1150 m, 1971-05-22, Z. B. Wang (王作宾)189892; same locality, alt. 1200~1300 m, 1995-06-29, Z. M. Tan et B. X. Zhao 95-48, 95-49, 95-50, 95-51; same locality, 1982-04-28, Z. Y. Zhang(张志英) 18504; same locality, alt. 1470 m, 1995-06-30, Z. M. Tan et B. X. Zhao 95-53; same locality, 1953-07-14, Y. M. Liang(梁一民) 9.

一年生或二年生草本,通常无毛。植株直立,高15~40 cm,通常单生,稀在基部分枝。中部以下叶大头羽状分裂,顶裂片心形或卵状三角形,长2~15 cm,宽2~10 cm,顶端急尖或钝,基部心形或近截形,不等侧,边缘近全缘、具波状齿、不整齐锯齿或牙齿,侧裂片比顶裂片小得多,每侧2~4枚,对生或互生,在侧裂片之间常杂有极小的裂片,叶柄基部具2个小耳,小耳半抱茎;上部叶不裂或大头羽状分裂,叶柄长1.5~2.5 cm,基部具2个半抱茎的小耳。总状花序在花期花排列疏松,具4~12花,花序轴纤细;花梗长1~2 cm。萼片淡绿色或淡紫色,长圆形,长9~11 mm,顶端急尖,外轮萼片宽约1.5 mm,

内轮萼片宽约 3 mm, 基部具囊。花瓣深紫色, 宽倒卵形, 长 18~20 mm, 宽 6~8 mm, 具长爪。雄蕊离生, 2 枚短雄蕊长 10~11 mm, 4 枚长雄蕊长 11~12 mm, 花药黄色。雌蕊线形, 长 12~13 mm, 稍具四棱。长角果细线形, 长 9~17 cm, 宽 1.5~1.8 mm, 具四棱, 黄绿色, 通常无毛, 稀被微柔毛; 喙长 12~25 mm。种子长圆形, 长约 2 mm, 宽约 1 mm, 黄褐色或近褐色。

本种与诸葛菜 *O. violaceus* (L.) O. E. Schulz 相近, 但本种植株通常无毛, 上部叶不裂或大头羽状分裂, 具长 1.5~2.5 cm 的叶柄, 花序轴纤细, 花排列稀疏, 长角果细线形, 长 9~17 cm, 宽 1.5~1.8 mm, 种子黄褐色或近褐色而不同。

2 湖北诸葛菜(秦岭植物志) 新等级 图 2

Orychophragmus hupehensis (Pamp.) Z. M. Tan et X. L. Zhang, stat. nov.

O. sonchifolius var. *hupehensis* Pamp. in Nouv. Giorn. Bot. Ital. n. ser. 17(2): 279, f. 6. 1910. TYPE: Hubei(湖北), Danjiangkou(丹江口), alt. 1000 m, 1996-06-30, Z. M. Tan et X. L. Zhang(谭仲明, 张小亮)96-1(neotype, SZ). Fig. 2

O. violaceus var. *hupehensis* (Pamp.) O. E. Schulz in Engl. Pflanzenr. 70(4, 105): 77. 1923; K. C. Kuan in Fl. Reip. Pop. Sin. 33: 43. 1987.

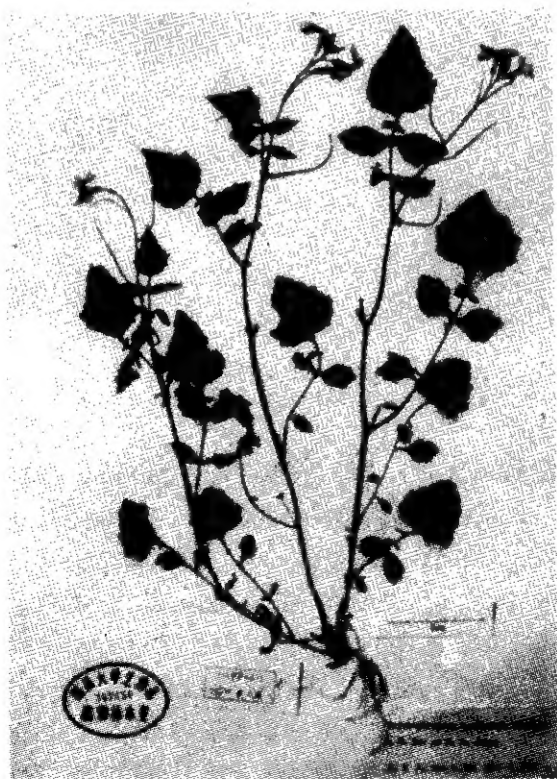


图 2 湖北诸葛菜

Fig. 2 *Orychophragmus hupehensis* (Pamp.) Z. M. Tan et X. L. Zhang

本种植株高 25~40 cm, 在基部多分枝, 茎直立。全部叶大头羽状分裂, 顶裂片近卵

形, 长 2.5~4.5 cm, 宽 2~4.5 cm, 中部 3 浅裂, 边缘具不整齐锯齿, 侧裂片 2~4 枚, 卵形或椭圆形, 边缘具不整齐齿, 在侧裂片之间常杂有小裂片, 叶柄基部两侧有 2 个耳状附属物半抱茎。长角果细线形, 长 8~10 cm, 宽约 1.5 mm, 种子金黄色, 长圆形, 长约 1.9 mm, 直径约 0.9 mm 而与诸葛菜 *O. violaceus* (L.) O. E. Schulz 不同。

分布于湖北丹江口市和十堰市, 生于海拔 450~1000 m 的山坡、林缘及沟谷中。

3 铺散诸葛菜 新种 图 3

Orychophragmus diffusus Z. M. Tan et J. M. Xu, sp. nov. TYPE: Zhejiang(浙江), Yuhang (余杭), alt. 300 m, 1995-06-01, Z. M. Tan et al. 95-16(holotype, SZ). Fig.3

O. violaceus var. *homaeophyllus* auct. non (Hance) O. E. Schulz; Y. H. Zhang in Fl. Zhejiang 3: 50. 1993. et J. Wuhan Bot. Res. 13(2): 184. 1995.



图 3 铺散诸葛菜

Fig. 3 *Orychophragmus diffusus* Z. M. Tan et J. M. Xu

Species affinis *O. hupehensi* (Pamp.) Z. M. Tan et X. L. Zhang, sed caulibus diffusis, foliis omnibus lyratis, lobis terminalibus cordatis vel reniformibus, margine irregulariter dentatis, dentibus magnis, lobis lateralibus 2~6, basalibus magnis, amplexicaulibus, siliquis brevioribus, 5~7 cm longis differt.

Herbae biennes. Caules ad basin multo ramosi, diffusi, 20~44 cm longi, subteretes, glabriusculi vel sparse puberuli. Folia omnia lyrata, lobis terminalibus cordatis vel reni-

formibus, inaequilateralibus, 1.5~3.5 cm longis, 2.2~5.5 cm latis, apice obtusis, basi cordatis, margine dentatis, dentibus magnis, irregularibus, lobis lateralibus 2~6, oblique ellipticis vel ovatis, margine subintegris vel dentatis, lobis basalibus magnis amplexicaulibus, supra sparsim puberula, subtus glabriuscula. Racemi sub anthesi 6~15-flori, pedicellis 10~15 mm longis, sparse puberulis. Sepala pallide viridia vel purpurea, oblonga, 10~12 mm longa, apice acuta, exteriora circ. 1.5 mm lata, interiora circ. 2.5 mm lata, basi saccata. Petala purpurea, late obovata, 1.8~2.2 cm longa, 8~10 mm lata, longe unguiculata. Stamina libera, 2 breviora 11~12 mm longa, 4 longiora 12~13 mm longa, glabra, antheris flavis. Pistillum lineare, glabrum. Siliquae lineares, leviter curvatae, subtetragonae, 5~7 cm longae, circ. 1.5 mm latae, viridulo-flavae, glabrae, rostris 8~10 mm longis. Semina oblonga, circ. 1.8 mm longa, 1 mm lata, lutea.

Zhejiang(浙江): Yuhang (余杭), alt. 300m, 1993-05-16, Y. H. Zhang(张渝华) 93001, 93009. **Shanghai**(上海): Sheshan(佘山), alt. 80 m, 1995-06-07, Z. M. Tan *et al.* 95-21; same locality, 1930-04-21, University I'Aurore 1009; same locality, 1930-04-10, University I'Aurore 1233; same locality, 1931-04-06, University I'Aurore 2036. **Jiangsu**(江苏): Zhenjiang (镇江), 1931-04-06, University I'Aurore 1875.

二年生草本。茎从基部多分枝,铺散,长20~44 cm,近圆柱形,几无毛或疏生微柔毛。全部叶大头羽状分裂,顶裂片心形或肾形,不等侧,长1.5~3.5 cm,宽2.2~5.5 cm,顶端钝,基部心形,边缘具齿,齿大,不整齐,侧裂片2~6枚,斜椭圆形或卵形,边缘近全缘或具齿,基部裂片大,抱茎,上面疏生微柔毛,下面几无毛。总状花序在花期具6~15花;花梗长10~15 mm,疏生微柔毛。萼片淡绿色或淡紫色,长圆形,长10~12 mm,顶端急尖,外轮萼片宽约1.5 mm,内轮萼片宽约2.5 mm,基部具囊。花瓣紫色,宽倒卵形,长1.8~2.2 cm,宽8~10 mm,具长爪。雄蕊离生,2枚短雄蕊长11~12 mm,4枚长雄蕊长12~13 mm,无毛,花药黄色。雌蕊线形,无毛。长角果线形,稍弯,近四棱形,长5~7 cm,宽约1.5 mm,黄绿色,无毛;喙长8~10 mm。种子长圆形,长约1.8 mm,宽约1 mm,黄色。

本种与湖北诸葛菜 *O. hupehensis* (Pamp.) Z. M. Tan et X. L. Zhang 相近,但本种茎铺散,叶全部大头羽状分裂,顶裂片心形或肾形,边缘具不整齐齿,齿大,侧裂片2~6,基部裂片大,抱茎,长角果较短,长5~7 cm 而不同。